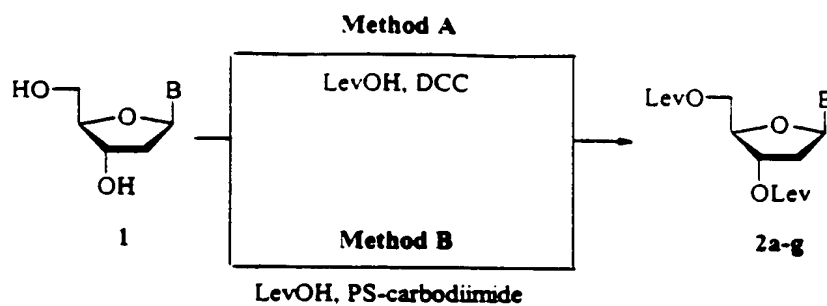


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a, B = T; b, B = C; c, B = C^{Bz}; d, B = A; e, B = A^{Bz}; f, B = G; g, B = G^{iBu}

Method A: LevOH, DCC, DMAP, Et₃N, 1,4-Dioxane.

Method B: LevOH, PS-carbodiimide, DMAP, DMAP·HCl, Et₃N, 1,4-Dioxane.

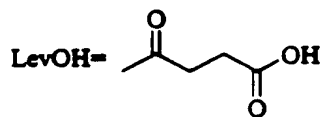
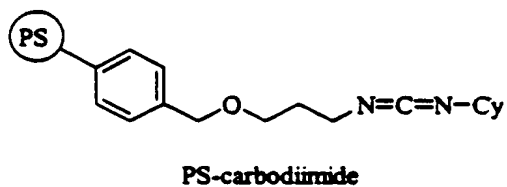
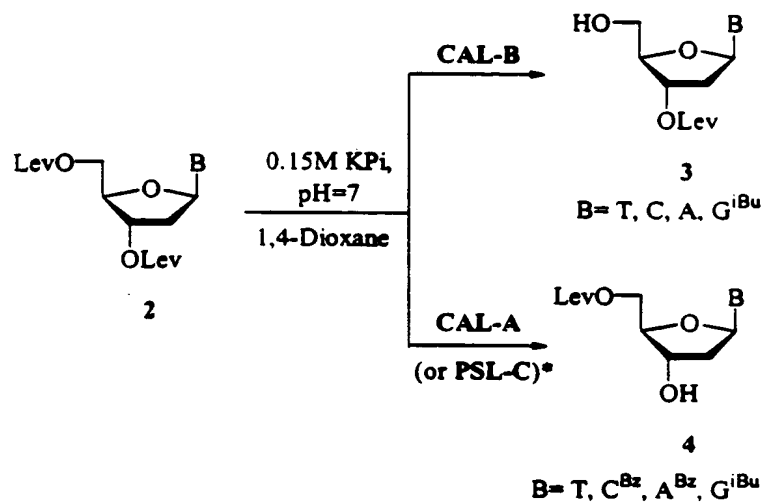


FIGURE 1

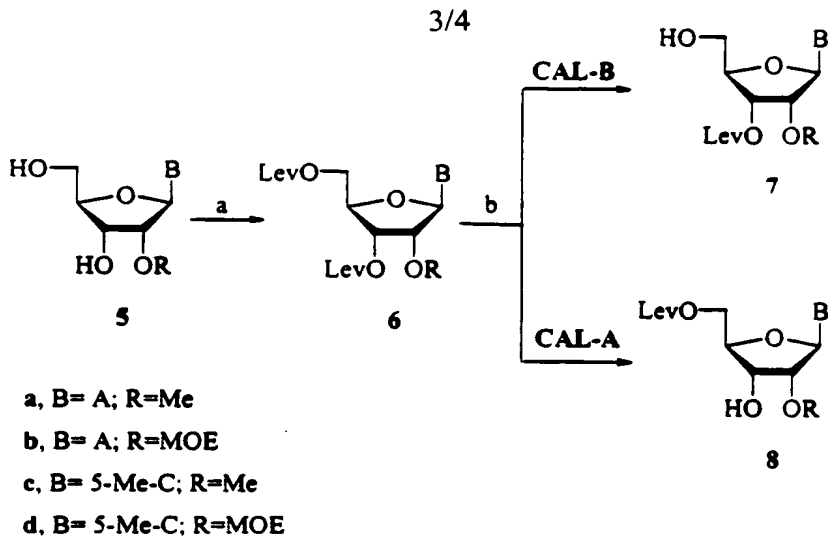
2/4



*PSL-C was used for di-Lev-dG^{iBu} (2g) since CAL-A did not catalyze the hydrolysis.

FIGURE 2

3/4



(a) LevOH, DCC, Et₃N, DMAP, 1,4-dioxane.

(b) 0.15M KPi (pH=7), 1,4-dioxane.

FIGURE 3

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Table 1. Regioselective Enzymatic Hydrolysis of di-Levulinyl esters 2.

entry	substrate	enzyme	T (°C)	t (h)	Yield (%) ^a	
					3	4
1	2a	CAL-B ^b	40	62	85	
2	2b	CAL-B	30	62	84	
3	2d	CAL-B	40	28	98	
4	2g	CAL-B ^c	40	18	80	
5	2a	CAL-A ^b	40	86		70
6	2c	CAL-A ^b	40	62		78
7	2e	CAL-A	40	68		85
8	2g	PSL-C	60	28		93

^a Isolated yield.

^b An extra fraction of lipase (30 mg) was added after 30 h.

^c It was used a ratio of 1:2 w/w (2g/CAL-B).

a, B= T; b, B= C; c, B= C^{Bz}; d, B= A; e, B= A^{Bz}; f, B= G; g, B= G^{iBu}

FIGURE 4